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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LIN, SHEW FEN	

ART UNIT	PAPER NUMBER
2166	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/788,970	BORKOVSKY ET AL.	
	Examiner	Art Unit	
	Shew-Fen Lin	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *various*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

a. This action is responsive to communications: application filed on 2/27/2004.

b. Claims 1-20 are pending in this Office Action. Claims 1, 8, and 20 are independent claims.

Priority

Applicant's claim for the benefit of a prior-filed application 10/364,078, filed on February 10, 2003; which claims priority to U.S. Provisional Patent Application No. 60/411,535, entitled "SPELLING IN WEB SEARCH", filed September 17, 2002, and U.S. Provisional Patent Application No. 60/413,092, entitled "SPELLING IN WEB SEARCH", filed September 23, 2002, under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Since the provisional application relied on part of the priority document (Continuation-in-Part), the claim of priority will be considered on ***a claim-by-claim basis***. The priority date of the instant application is at least February 27, 2004 (the filing date), but depending upon the specific material claimed, could be as early as September 17, 2002.

Claim Objections

Claims 9-10 are objected to because of the following informalities: "**based on a whether said...**". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 2-6 recite, "wherein said second file does not contain said first spelling.", "wherein said second spelling is not contained in any result field (title, abstract, URL) of said second file". The relevant discussion appears in the specification at paragraph [0098], where it states: "...In searching the page for similar spellings, the search engine may *search the whole page, rather than only those portions of the page that would be displayed as result fields (e.g., the page title, abstracts generated for the page, the page's URL, etc.*). As a result, the search engine locates one or more instances of the second spelling. In response to locating the second spelling, the search engine adds the second spelling to a list of candidate alternative spellings.". The negative limitations do not appear in the specification as filed and are incompatible with the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation, "comparison of *frequencies of occurrences* of said first spelling and *frequencies of occurrences* of said second spelling", renders the claim indefinite because "frequencies of occurrences" can be frequencies of occurrences in the first file, in the second file, sets of files, or any document domain. Clarification is needed.

Claim Rejections – 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 is directed to a method for generating a list of candidate alternative spelling by extracting similar spelling from a linked file. The claimed inventions, as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." *State Street, 149 F.3d at 1373, 47 USPQ2s at 1601-02. MPEP 2106.* In this case the result is simply adding a similar spelling to a list. The claimed limitations are an abstraction as

they are not useful, concrete, and tangible they are not put in any tangible form and not useful because they are not presented in such a way as to produce and/or provide some result that is of utility that may exist in the specification however no specific use is provided for in the claimed invention. Thus the claims are non-statutory and stand rejected under 101 as not **producing a "useful, concrete and tangible** result."

Regarding claims 2-10 depend from rejected claim 1, comprise the same deficiencies as those claims directly or indirectly by dependence, and are therefore rejected on the same basis.

Claims 11-20 are directed to a computer readable medium including a data signal embodied in a acoustic or light waves (see spec. [0103]). The subject matter does not fall within a statutory category of invention because it is neither a process, machine, manufacture, nor a composition of matter. Instead, it is directed to a form of energy. Forms of energy do not fall within a statutory category since they are clearly not a series of steps or acts to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 7-8, 11-12, and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Gravano et al. (US Patent 7,146,358, hereinafter Gravano).

As to Claim 1, Gravano discloses a method for generating a list of candidate alternative spellings, comprising: finding, among a plurality of files, a first file that contains a link that indicates a first spelling that was entered by a user (search documents to locate one or more documents that contains anchor text that matches query term, column 2, lines 3-5), wherein said link links to a second file (Fig. 5, 530, column 2, lines 6-8); locating, within said second file, a second spelling that is spelled similarly to, but not exactly the same as, said first spelling (identify potential translations for anchor text, Fig. 5, 540, 560, column 6, lines 15-21, lines 32-39); and adding said second spelling to a list of candidate alternative spellings of said first spelling (output translated query, i.e. second spelling, Fig. 5, 570, column 6, lines 39-44).

As to Claim 2, Gravano discloses the method of claim 1, wherein said second file does not contain said first spelling (second file is in second language and first spelling is in first language, i.e. second file will not contains the first spelling, column 2, lines 53-58).

As to Claim 7, Gravano discloses the method of claim 1, wherein said first spelling comprises multiple words and said second spelling comprises multiple words (column 7, lines 5-16).

As to Claim 8, Gravano discloses the method of claim 1, further comprising: filtering said list of candidate alternative spellings of said first spelling based on a comparison of frequencies of occurrences of said first spelling and frequencies of occurrences of said second spelling (frequency of co-occurrences, column 7, lines 5-15).

As to claims 11-12, are directed to a computer readable medium carrying instructions for performing the methods of claims 1-2 respectively and are rejected along the same rationale.

As to claims 17-18, are directed to a computer readable medium carrying instructions for performing the methods of claims 7-8 respectively and are rejected along the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point

out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3-6 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gravano as applied to claim 1 above, and further in view of Abe (US Patent 6,883,001).

As to Claims 3-6, Gravano discloses the elements of claim 1 as noted above but does not explicitly disclose wherein said second spelling is not contained in any result field (title, abstract, or URL) of said second file.

Abe discloses extract data only from the "body" section of the document and remove tag data (Figs. 8, 9A/B, column 9, lines 26-39).

It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of the cited references because Abe's teaching would have allowed Gravano 's to determine the cross language information based on the body of the document as suggested by Abe. The ordinary skilled artisan would have been motivated to exclude result fields such as "title", "abstract" and other section of general use, to provide the effective for information search.

As to claims 13-16, are directed to a computer readable medium carrying instructions for performing the methods of claims 3-6 respectively and are rejected along the same rationale.

Claims 9-10 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gravano as applied to claim 1 above, and further in view of Chang et al. (US Patent 7,127,450, hereinafter Chang).

As to Claims 9-10, Gravano discloses the elements of claim 1 as noted above but does not explicitly disclose filtering said list of candidate alternative spellings of said first spelling based on a whether said first spelling is a plural form of said second spelling or vice versa.

Chang discloses removing plural form from query term by normalization (Fig. 2, 44). For example, the word "computers" would have the normalized form "computer" with the plural suffix removed (column 2, lines 48-59).

It would have been obvious to one ordinary skill in the information retrieval processing art at the time of the invention to combine the teachings of the cited references because a normalize term can be used to provide effective searching, such as to identify alternative word spelling related to the term in a directory (Fig. 9, Chang). The ordinary skilled artisan would have been motivated to remove the plural form of a spelling from the list to avoid the redundancy by only including distinct term in the list.

As to claims 19-20, are directed to a computer readable medium carrying instructions for performing the methods of claims 9-10 respectively and are rejected along the same rationale.

Related Prior Arts

The following list of prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Sato; Mitsuhiro et al., US 6212517 B1, "Keyword extracting system and text retrieval system using the same".
- Bates; Cary Lee et al., US 7219298 B2, "Method, system, and program for verifying network addresses included in a file".
- Singh; Jaswinder Pal et al., US 6915294 B1, "Method and apparatus for searching network resources".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shew-Fen Lin whose telephone number is 571-272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shew-Fen Lin
Patent Examiner
Art Unit 2166

June 14, 2007